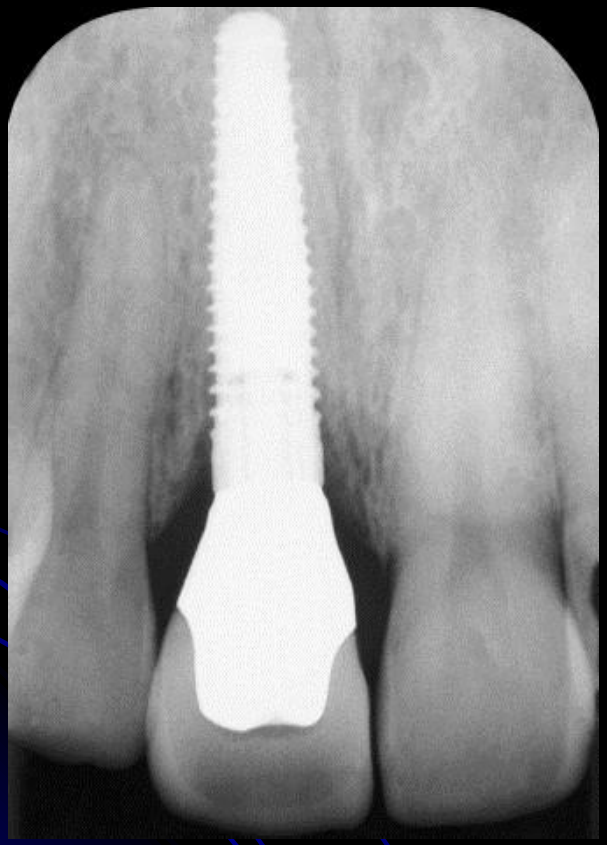
TREATMETN PLANNING FOR REPLACMENT OF MISSING TEETH

Dr. Ahmad El-Kouedi
Lecturer of Fixed Prosthodontics

- Treatment planning is the procedure of formulating and developing a logical sequence of treatments in an attempt to restore esthetics and function for the patient.
- The plan should be written, presented then discussed in detail with the patient.

Methods of dental replacement

1- Removable Partial Denture
(acrylic or vitalium)
2- Tooth supported FPD
(conventional, resin bonded)
3- Implant supported FPD



Factors affecting the selection of prosthesis type

1- Biomechanical considerations
2- Prospective abutments
3- Esthetic requirements
4- Patient’s desire
5- Financial factors
6- Laboratory support
7- Patient’s motivation and co-operation

Biomechanical Considerations

1- Decision to remove a tooth

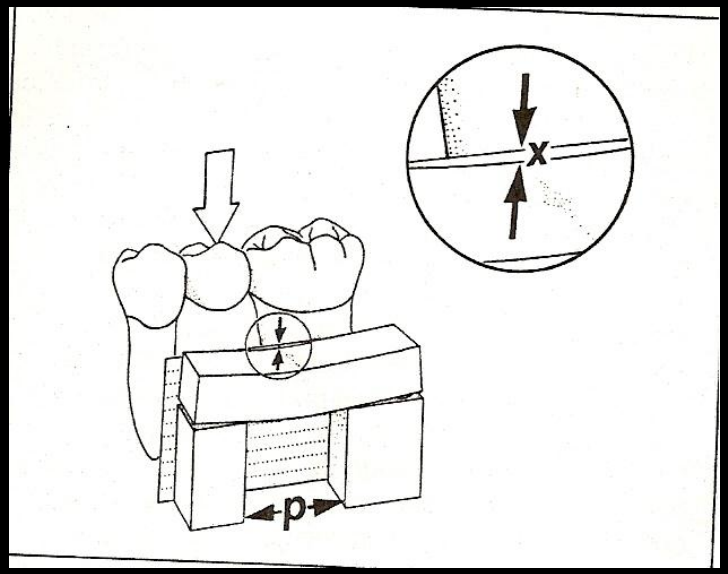
2- Edentulous span

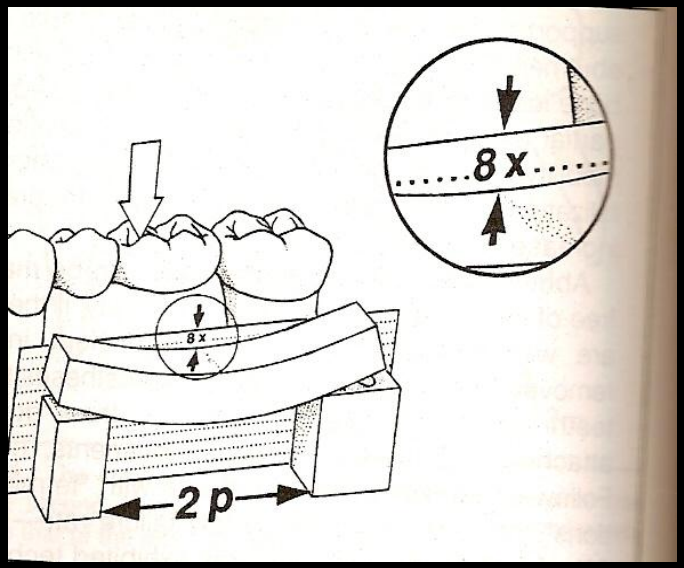
i) distribution….no distal abutment reqiures a RPD, implant supported RPD, cantilever in special cases.

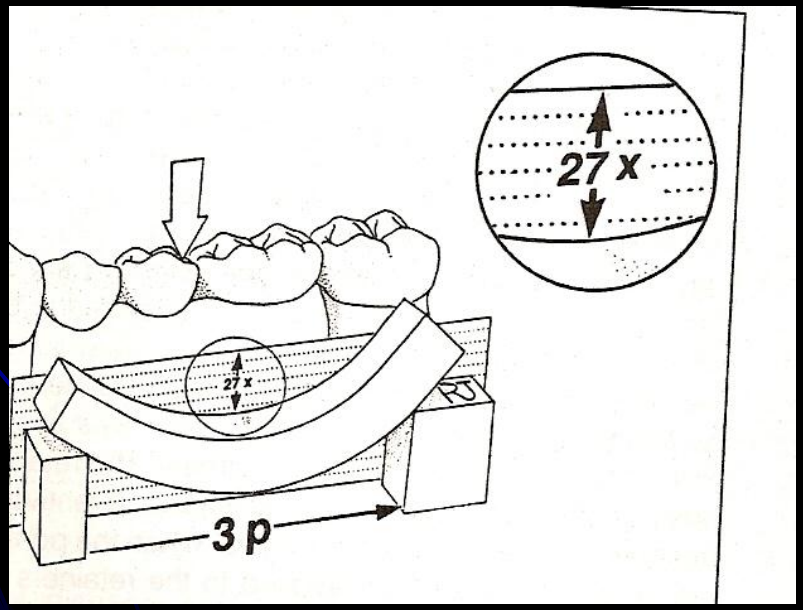
multiple spaces = several bridges or RPD

ii) Length

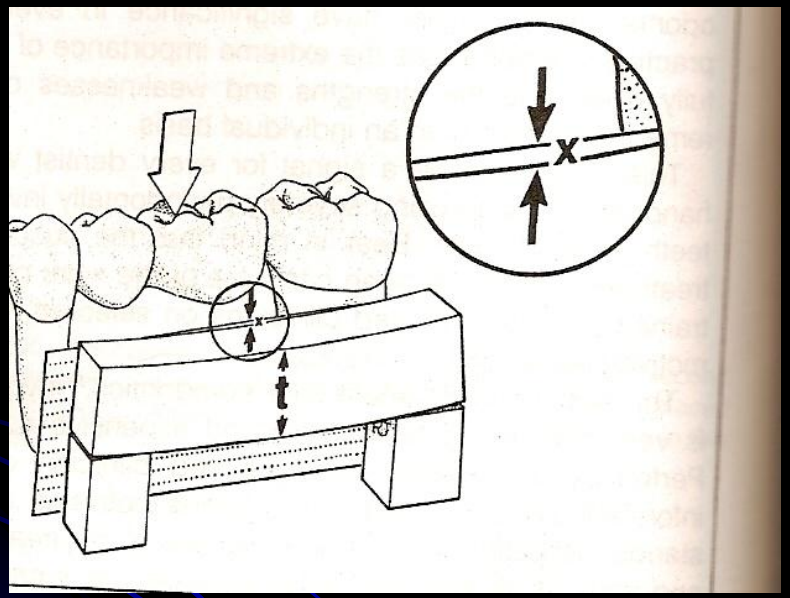
All FPD have some degree of bending…the longer the RPD the greater the bending

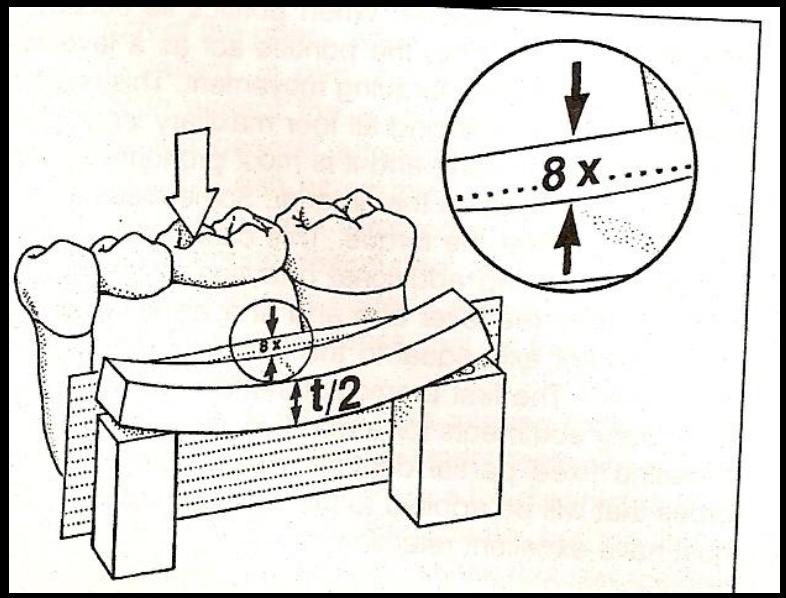

x
p


8 x
8 x
2 p


27 x
27 x
3 p

Different thicknesses





Excessive flexing will lead to:

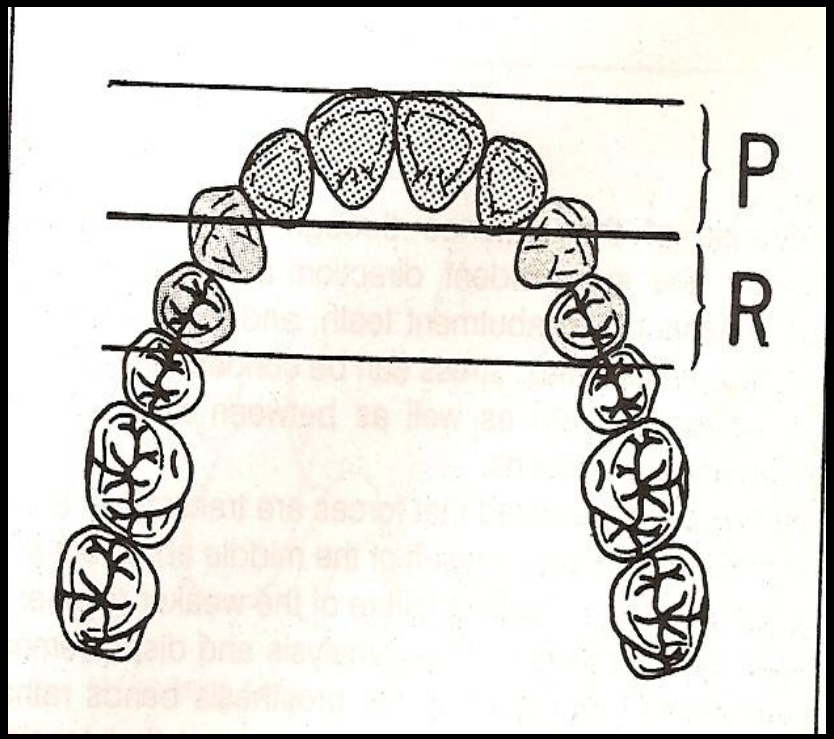
- fracture of porcelain
- connector breakage
- loosening of retainer

This happens when a FPD replaced more than 3 posterior teeth, long span FPD and short clinic crowns of abutments.

Alternative? Implants if bone/ridge are good, or a RPD.

NB: can increase the size of the connector & use a higher strength alloy.

iii) Arch form



3- The Prospective Abutment

- Information should b obtained from clinical, radiographic and study cast examination.

a) Pulpal condition:

vital or non-vital, sound or carious?

b) Coronal variation and alignment

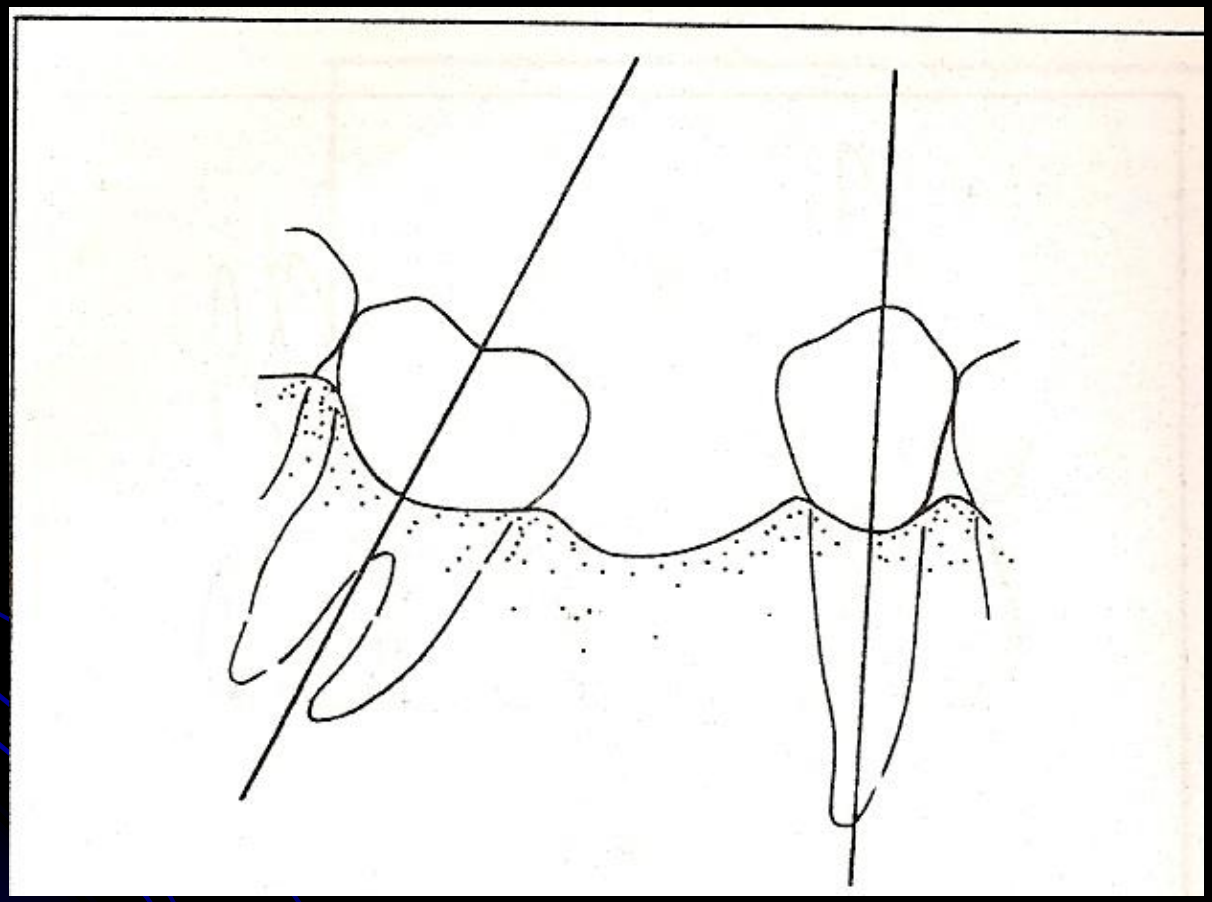
overerupted teeth: spot grinding or filling or intentional endo or extraction?

short crown: type of FPD? retainer type? FL location? convergence?

c) mesial tilting of second lower molar

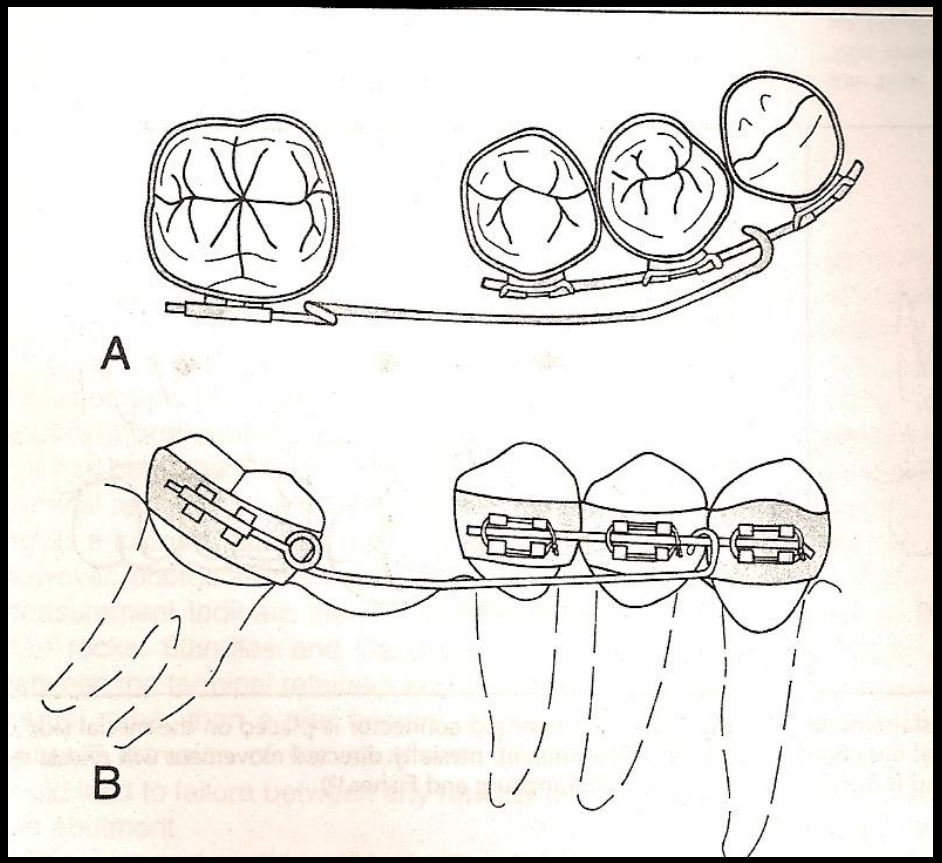
if the lower first mandibular molar is extracted and no restoration is placed, over time the space will close and the angulation of the succeeding molar will increase. This will prevent a path of insertion or a tooth lock will occur with the wisdom tooth.

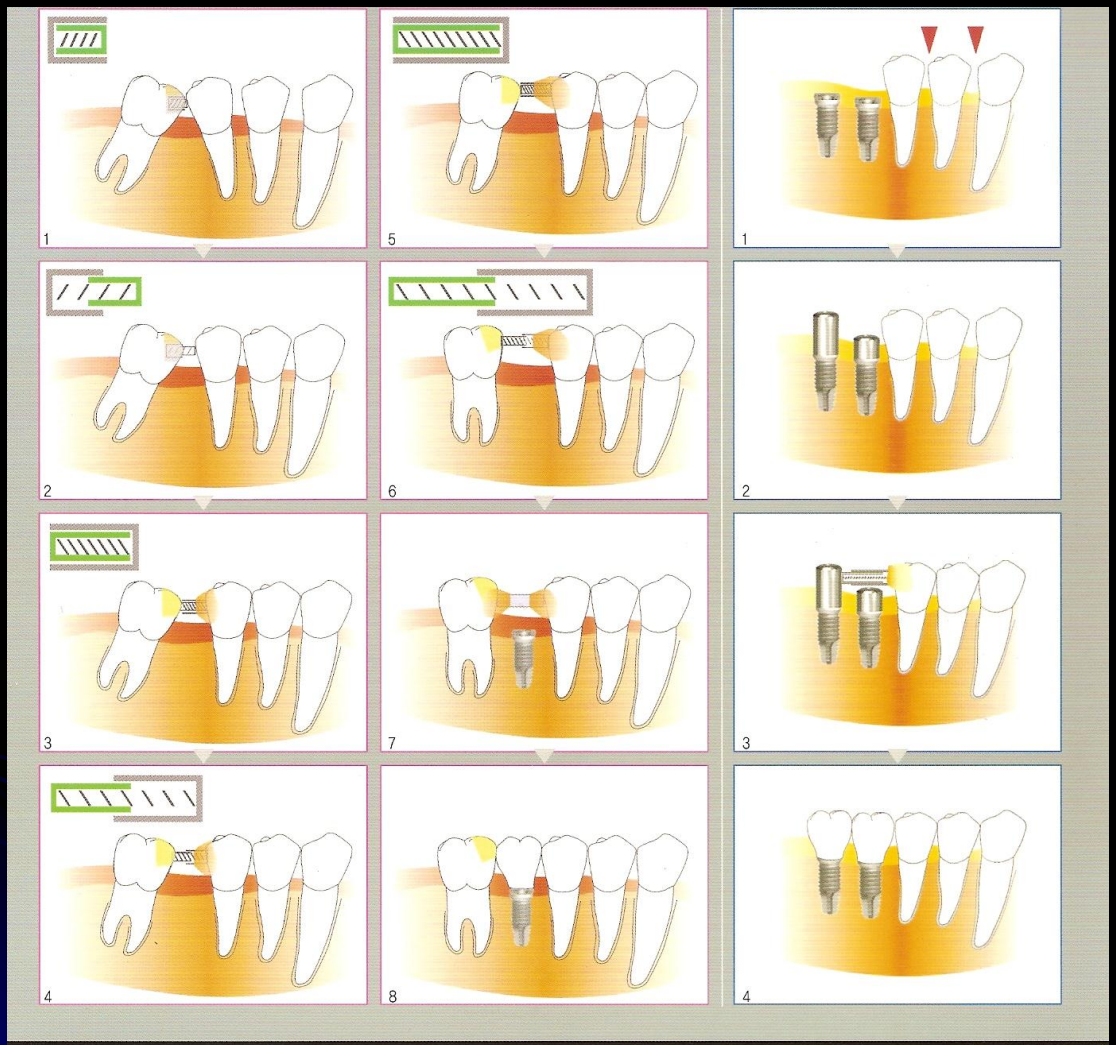
Lack of parallism between abutments



Modalities of Treatment

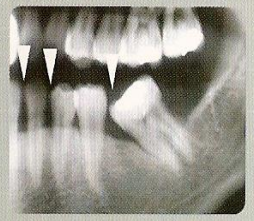
1- Orthodontic uprighting




1
5
1
2
6
2
3
7
3
4
8
4
The molar uprighting and making the interdental space are much faster and easier!
EZSPACER

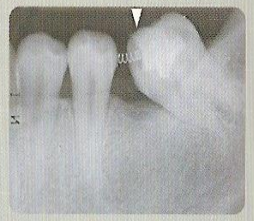
Making the interdental space before implanting

01 Pre-treatment



02 Panoramic view

03 Mounting the ezspacer



04 X-ray view after a week

05 Removing the ezspacer

06 Mounting the ezspacer with different sizes

07 Removing the ezspacer after 1 week-box form filing at the molar region

08 Etching at the premolar region

09 Mounting the other ezspacer

10 After 1 week

11 The picture of patient coming to the clinic after 2 weeks owing to his circumstance

12 Implanting

13 Implanting

14 Panorama view after implanting

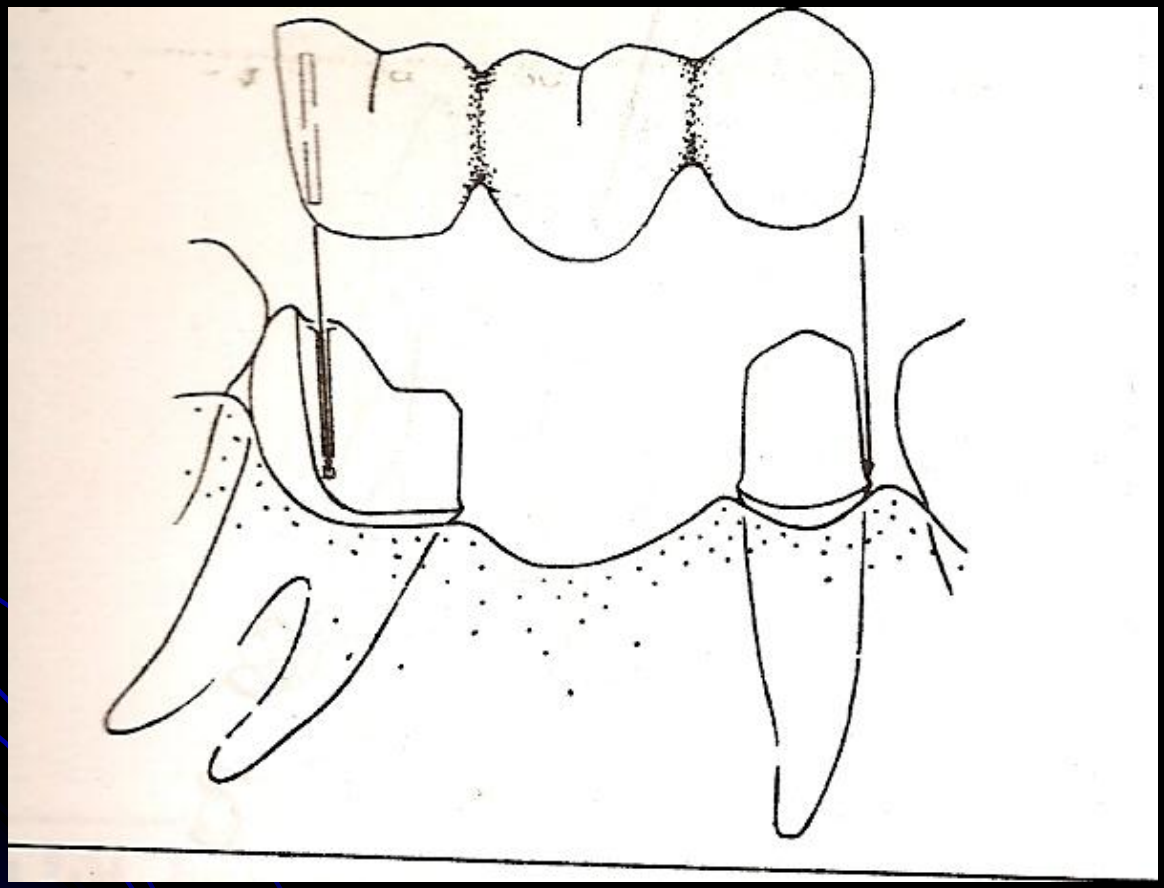
15 Taking the impression

16 Maintaining the space after taking the impression

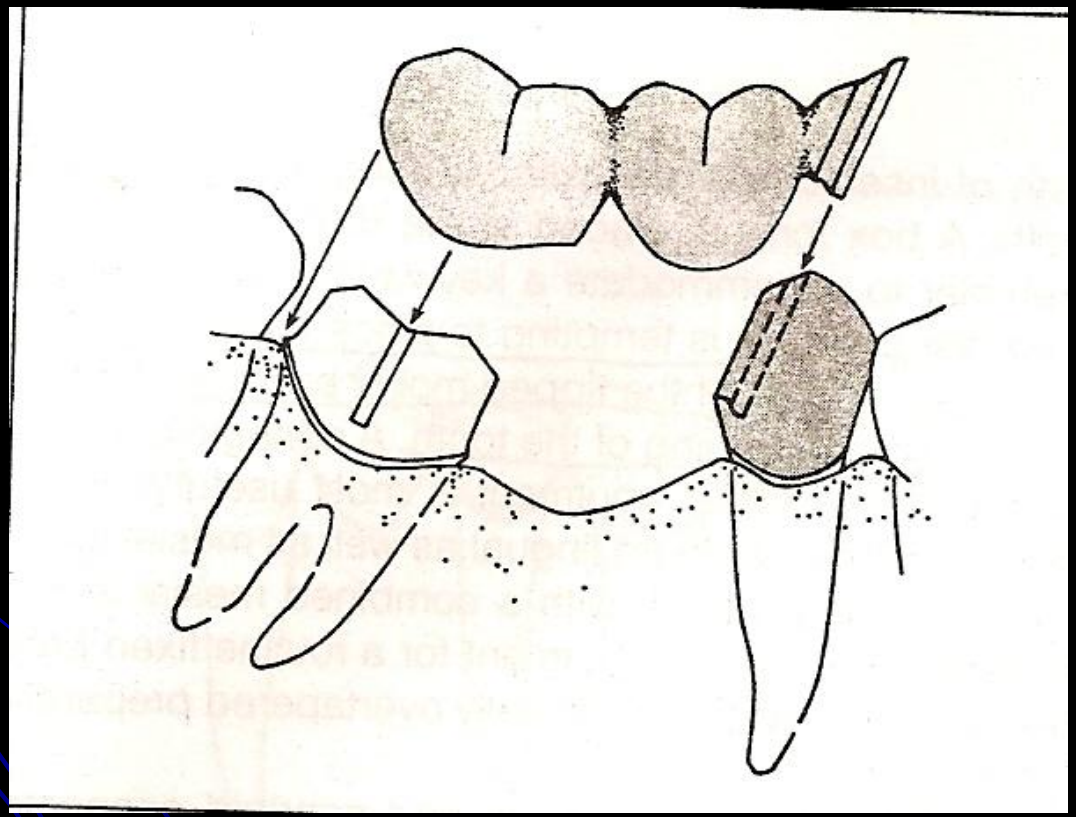
17 Finishing the upper prosthesis

18 Panoramic view

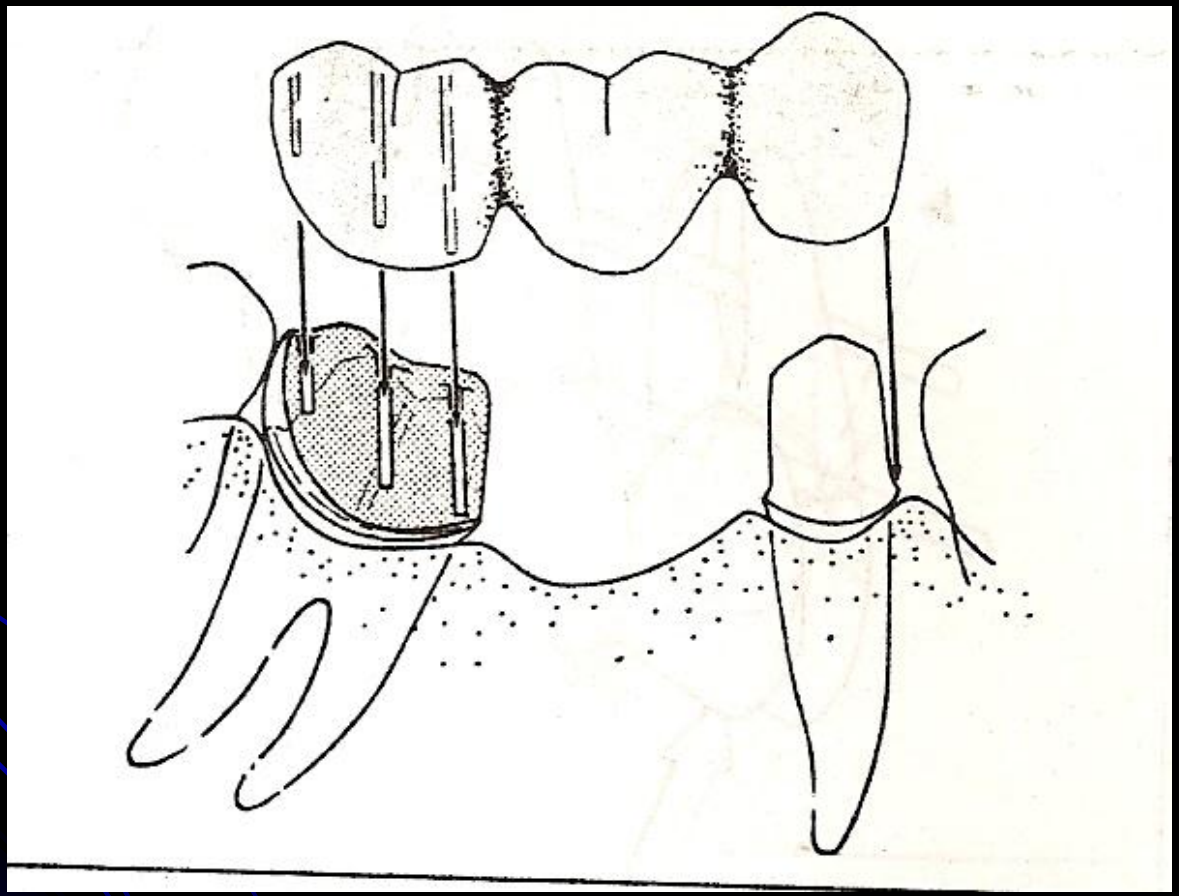
2- Change of bridge design
½ crown on tilted molar and path of insertion with premolar



Non-rigid connector on distal aspect of premolar with the path of insertion with the molar



Telescopic crown on molar then conventional FPD



Root Portion & Periodontal Condition

1)Crown/Root ratio (alveolar crest)

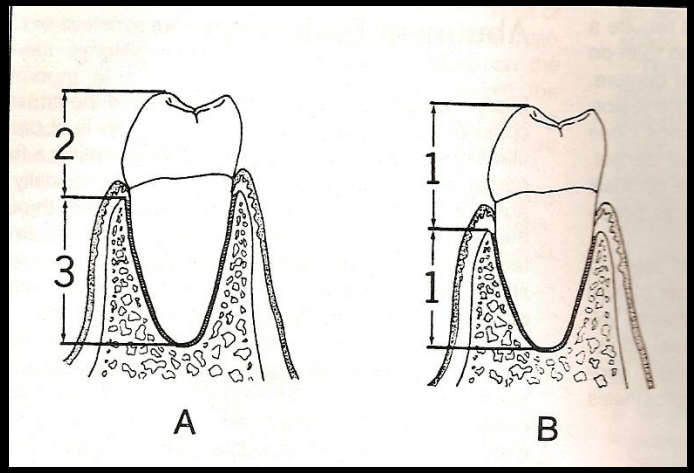
Optimum 2:3 Accepted 1:1

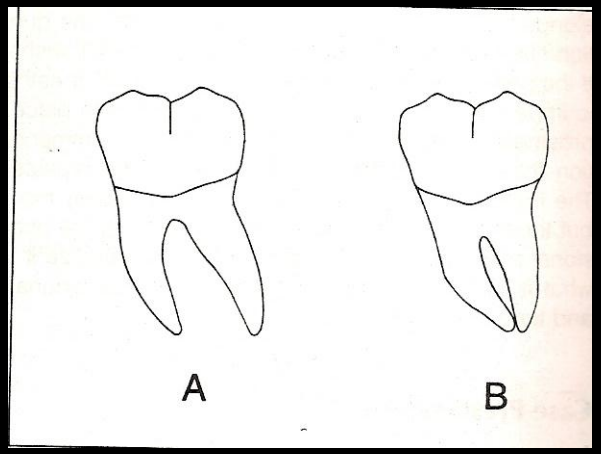
Fav opp occlusion; healthy peridontium; highly motivated pt; fav rt configuration

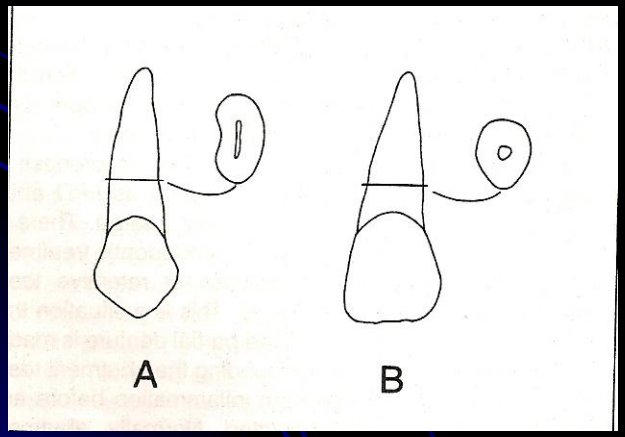
2) Root shape & angulation

Broad FL > MD; seperated > fused;

Elliptical > round; aligned > tilted


2
3
A
1
1
B


A
B


A
B

3) Periodontal ligament surface area

Ante's Law: